

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of::

Edward J. A. Pope : Leon Y

For: Integrated electro-:

luminescent biochip
Serial No. 09/965,683:

Serial No. 09/965,683 : Filed September 27, 2001 :

Leon Yun Bon Lum

Examiner

Art Unit 3284

LISTING OF CLAIMS

To the Commissioner of Patents and Trademarks:

In response to an office action mailed September 7, 2005 the applicant hereby submits his listing of claims as follows:

Listing of claims:

Claim 1 is cancelled.

Claim 2 is cancelled.

- 3. (As currently amended) A chip of claim 33 in which said light source is an electro-luminescent material.
- 4. (As currently amended) A chip of claim 33 in which said light source is an organic electro-luminescent material.
- 5. (As currently amended) A chip of claim 33 in which said light source is an inorganic electro-luminescent] material.
- 6. (As currently amended) A chip of claim 33 in which said light source is connected by conductive electrodes.
- 7. (As currently amended) A chip of claim 33 in which said optical detector is a semi-conducting material.

- 8. (As currently amended) A chip of claim 33 in which said optical detector is composed of amorphous silicon.
- 9. (As currently amended) A chip of claim 33 in which said optical detector is tuned to respond to a specific wavelength range of light.
- 10. (As currently amended) A chip of claim 33 with multiple optical detectors in which each of said optical detectors is tuned to a different wavelength range of light.
- 11. (As currently amended) A chip of claim 33 with multiple optical detectors in which each of said optical detectors is tuned to a different wavelength range of light and the output of these optical detectors produces a spectra.

 Claim 12 is cancelled.
- 13. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a bioactive material.
- 14. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a protein.
- 15. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to an antibody.
- 16. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a fluorescence-labeled antibody.
- 17. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to an organic dye.

- 18. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous gel.
- 19. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous gel doped with an organic dye.
- 20. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous gel doped with either a protein or an enzyme.
- 21. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous gel containing an antibody.
- 22. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous gel encapsulating a living cell.
- 23. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel.
- 24. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel doped with an organic dye.
- 25. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel doped with a protein or an enzyme.

- 26. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel containing an antibody.
- 27. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel encapsulating a living cell.
- 28. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel microsphere.
- 29. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel microsphere doped with an organic dye.
- 30. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel microsphere doped with a protein or enzyme.
- 31. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel microsphere containing an antibody.
- 32. (As currently amended) A chip of claim 33 in which each of said sensors is coupled to a porous silica gel microsphere encapsulating a living cell.
- 33. (New) A chip comprising a plurality of sensors each of which contains at least one light source and at least one optical detector.